

ABSTRACT

A machine spindle includes a casing and a drawbar assembly disposed in the casing for clamping a tool in place. The drawbar assembly includes a front drawbar having a tool clamp, and a rear drawbar movable rearwardly under a spring force for pulling the front drawbar rearwardly to activate the clamp. A rearward force from the rear drawbar is transmitted to the front drawbar by a wedge arrangement that includes multiple pairs of wedges that have cooperative sliding surfaces that make surface contact (as opposed to line contact) with one another. The cooperative sliding surfaces are configured to provide an amplified rearward force against the front drawbar during a final stage of clamping.